

## **Patent Abstracts of Japan**

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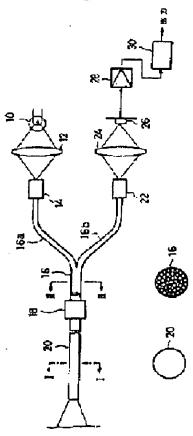
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TITLE

**OPTICAL FIBER SENSOR** 



ABSTRACT:

PURPOSE: To exactly and easily analyze and measure a specimen by providing a light source, a light receiving device, and an optical fiber of bundle type.

CONSTITUTION: This sensor has the light source 10 for light emission, the light receiving device 26 which receives the reflected light of the light emitted to the specimen from the light source 10 and converts the light signal to an electric signal, and the optical fiber 16 which sends the light of the light source 10 to the specimen and sends the reflected light thereof to the light receiving device. The optical fiber 16 is the bundle type formed by bundling many element fibers of a small diameter and the front end thereof is branched to two pieces. The optical fiber 20 is commonly used for light emission and light reception. The light emitted from the light source 10 passes the optical fiber 16a, then the optical fiber 20 connected to a connector 18. The specimen is irradiated with this light. The reflected light thereof passes the optical fiber 20 again, passes the optical fiber 16b and is received in the light receiving device 26. The specimen is easily and exactly analyzed and measured without making the disposition adjustment of the front end of the optical fiber, etc.

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